CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lease Improvement Request, drilling one new ground water well and install one stock water tank.
Proposed Implementation Date:	Summer 2019
Proponent:	Roger Sanderson, DNRC grazing lessee
Location:	T6N-R1E-Section 16 NW4SE4
County:	Broadwater
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Roger Sanderson has requested to drill one new ground water well and install a stock water tank on state land. There is an existing spring near the location of the proposed well, however it is not a reliable water source. The new well will provide reliable water to stock on the state-owned tract. The well would be drilled to a depth of approximately 300' (based on other wells in the area) and would be cased. The lessee would then use a generator seasonally to run the pump to provide water to the tank for livestock and wildlife use. Minimal impacts to the environment would occur as the drilling of the water well would only impact a very small amount of surface area.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Roger Sanderson-Surface Lessee and Proponent, Lease #3073075
DNRC-Surface Owner

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project. A water right would be submitted to the DNRC Water Resources Division after the well is functional with both DNRC and Sanderson on the water right.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Deny Roger Sanderson permission to drill the new water well.

Alternative B (the Proposed action) – Grant Roger Sanderson permission to drill the new water well.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The proposed action would only require minimal surface disturbance as the water well is drilled. Minimal disturbance would occur once the well is completed and water tank are installed. Existing trails will be

used to access the site and no off-road traffic is needed as the proposed well and tank location is next to a dirt road.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are no documented and/or recorded water rights associated with the proposed project area. The proposed action will improve overall water reliability and quantity for the proponent on the state pasture. Cumulative effects to water resources are not expected from the project. The water well would provide reliable water to livestock therefore lessening the impact on the ephemeral drainages. Other water quality and/or quantity issues would not be impacted by the proposed action.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The proposed action would not impact the air quality.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Vegetation would be minimally impacted as the water well is drilled. DNRC Land Use Specialist Heidi Crum completed a site visit on 4/18/19 and found the following species in the area near the proposed well site: prairie junegrass, bluebunch wheatgrass, big sagebrush, fringed sagewort, blue gramma, needle & thread grass and rose pussytoes. Noxious and annual weeds within the proposed construction areas are a concern, but this concern would be mitigated as the proponent is responsible for controlling weeds within the project area by the existing grazing lease. Cumulative impacts on the vegetative resources are not expected as the proposed project area would be reclaimed and reseeded with a DNRC approved mix.

A review of Natural Heritage data through the NRIS was conducted and found the Lesser Rushy Milkvetch (*Astragalus convallarius*) was documented nearby in Section 17. The proposed well and tank would have no impacts to this documented point observation, which is approximately 0.8 miles away. During the site visit, Heidi Crum did not document any vetch species in the immediate area of the proposed well and tank site.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

This tract provides habitat for a variety of big game species (elk, mule deer, whitetail deer, pronghorn antelope), predators (coyote, fox, badger), upland game birds (sharp tail grouse, Hungarian partridge), other non-game mammals, raptors and various songbirds. The proposal does not include any land use change which would yield changes to the wildlife habitat. The proposed action would not impact wildlife forage, cover, or traveling corridors. Nor will this action change the juxtaposition of wildlife forage, water, or hiding and thermal cover. DNRC will require the proponent to install a wildlife escape ramp in the tank.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

There are no threatened or endangered species, sensitive habitat types, or other species of special concern associated with the proposed project area.

A review of Natural Heritage data through the NRIS was conducted. There were zero animal species of concern and one potential aquatic species of concern noted on the NRIS survey: Fish-Brook Stickleback. This particular tract of grazing land does not contain many, if any of this species. If any are present, they may be dispersed into surrounding permanent cover.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A cultural resource inventory was completed by Heidi Crum, Helena Unit Land Use Specialist. No cultural resources were found within the project area, it is assumed that cultural resources would not be impacted by this proposed project.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The installation of the new water well and tank would have minimal impacts the aesthetic character of the land.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The demand on environmental resources such as land, water, air, or energy would not be affected by the proposed action. The proposed action would not consume resources that are limited in the area. There are no other projects in the area that would affect the proposed project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other projects or plans being considered on the tract listed on this EA.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The proposed project would not change human safety in the area.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The proposed water well would improve livestock distribution and generally improve the proponent's ranching opportunities.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

This project would not create any new jobs, as the project would be completed in house by the proponent.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action would not affect the tax base or tax revenues.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

This project is of a small scale and being funded by the lessee. There would be no excessive stress placed of the existing infrastructure of the area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The proposed action is in compliance with Federal, State, and County laws. No other management plans are in effect for the area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This tract is not legally accessible. The proposed action is not expected to impact general recreational and wilderness activities on this state tract.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposal does not include any changes to housing or developments. No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed action would not impact the cultural uniqueness or diversity of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Cumulative impacts are not likely as the area is only used for livestock grazing and the water well will improve the long-term viability of grazing on the tract. The addition of the water tank will provide a reliable source of water to the pasture which will positively impact livestock distribution. This project is authorized under the lease improvement request form.

EA Checklist Prepared By:	**Name:** Heidi Crum	**Date:** June 20, 2019
	Title: Land Use Specialist, Helena Unit, Central Land Office	

V. FINDINGS

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed action) – Grant Gordon Sanderson permission to drill the water well with casing and pump, install a stock water tank, and utilize a protable generator seasonally to provide water to his cattle.

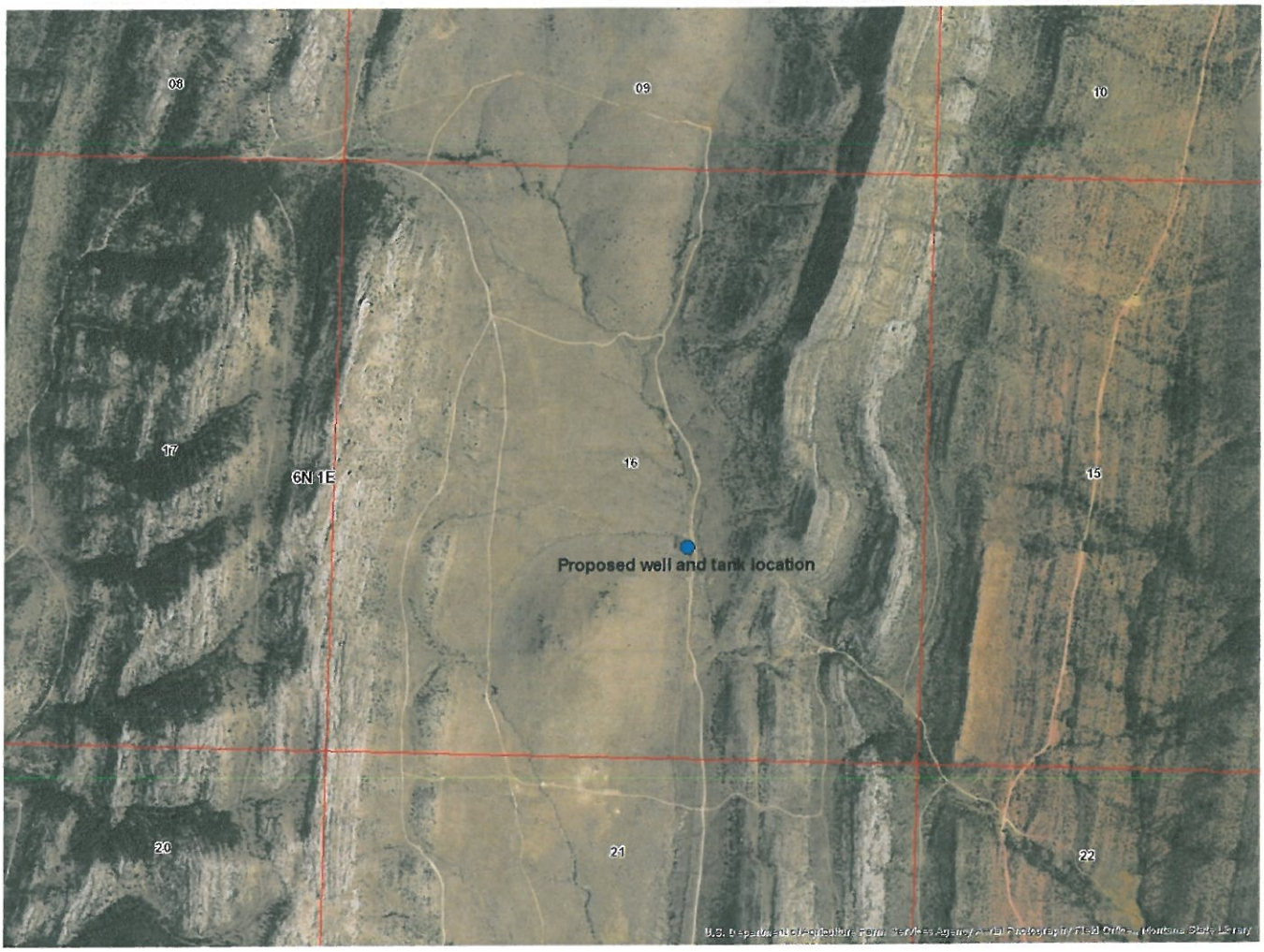
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

None

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS ☐ More Detailed EA ☑ No Further Analysis

EA Checklist Approved By:	**Name:** John Huston **Title:** Helena Unit Manager
Signature: J. Huston	**Date:** 6/21/19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Proposed well and tank location
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